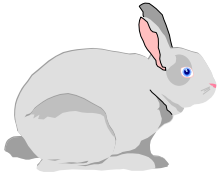




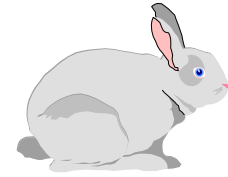
# EMERGENCY DISEASE PROGRAM ALERT

## Animal Health and Food Safety Services

### Animal Health Branch



### Rabbit Calicivirus in New York December, 2001



Rabbit calicivirus disease (RCD) was confirmed on December 7, 2001 in a captive exotic animal facility in New York. Three of eight rabbits in a collection at the facility died between December 1 and December 9. The remaining rabbits were immediately quarantined and then depopulated by December 10, 2001. Investigation to determine the source of the virus continues.

This is the third occurrence of RCD in the U.S. in the last few years. In Iowa, during April 2000, RCD was contained at one facility. The second outbreak occurred in August 2001 in a Utah rabbitry. The Utah facility was linked to other rabbitries in Montana and Illinois, which underwent extensive testing and were determined to be free of the disease. The source of the Iowa and Utah outbreaks could not be definitively determined.

#### What is RCD?

RCD, also known as viral hemorrhagic disease, is a viral disease that affects rabbits in the genus *Oryctolagus*. The incubation period is 24 to 48 hours. It causes liver inflammation (hepatitis) and prevents the blood from clotting. Rabbits may die without showing any outward signs of illness, or may show:

- ▶ fever
- ▶ inappetance
- ▶ lethargy
- ▶ spasms
- ▶ breathing difficulties
- ▶ blue colored lips or mucous membranes
- ▶ bleeding from body cavities

Death is due to massive internal hemorrhaging and liver impairment. Eighty to 100 percent of

susceptible rabbits developing the disease may die.

#### Where did it come from?

RCD was first identified in China in 1984 and then spread through Europe in the late 1980s and early 1990s. It is now endemic (constantly present) in parts of Europe, Asia, and Africa. In the western hemisphere, the disease has been endemic in Cuba since 1993. An outbreak occurred in 1988 in Mexico, but the disease was eradicated by 1992. In 1995, RCD killed 10 million rabbits during 8 weeks in southern Australia.

#### Can people or other animals get RCD?

No. The virus only affects rabbits of the genus *Oryctolagus*. This genus includes most show, pet, and laboratory rabbits. Wild rabbits in the US, including the cottontail and jack rabbit, are not in the genus *Oryctolagus*, and are not susceptible to RCD. Other types of caliciviruses have been found in people, cattle, sea lions, and cats. Cats affected with feline calicivirus show influenza-like signs, and humans show gastrointestinal signs such as diarrhea.

#### Can my rabbit contract RCD?

*At this point, the officials in New York believe that the outbreak is contained. However, if your rabbit dies suddenly, or exhibits signs of RCD, you should contact your 4H or FFA advisor and your veterinarian.* They may submit specimens to a laboratory to determine the cause of death. If your veterinarian suspects RCD, he or she will contact the Animal Health Branch or the United States Department of Agriculture (USDA) – Veterinary Services Area Office.

As a standard precaution, you should follow appropriate biosecurity precautions to prevent disease introduction to your facility. Biosecurity measures are important to safeguard the health of your rabbits, and include:

- ▶ Avoid unnecessary contact with other people's rabbits. If you must contact other people's rabbits, be sure to wash your hands or shower and change your clothes prior to handling your rabbits.
- ▶ Restrict visitors to your rabbitry and assure that those who visit limit the handling of your animals and take precautions to minimize disease exposure.
- ▶ After visiting a show, fair, or meeting where rabbits were commingled, shower and change clothes before handling your rabbits.
- ▶ Know the health status of the rabbitry from which you purchase your rabbits.
- ▶ Control insects, birds, rodents, and other wild animals, which may be disease carriers, on your facility.

The virus persists in the environment, and can be transmitted through direct contact with infected rabbits or by indirect contact with objects (cages, feeders, grooming equipment, etc.) or people and their clothing that have been contaminated by rabbit secretions or excretions. Transmission may occur following consumption of contaminated water and food, or exposure to rabbit products (meat, furskins, offal). Vermin, such as insects or rodents, or domestic animals and birds may also become contaminated with the virus and transfer it to rabbits. The virus may be inhaled, eaten, or absorbed through scrapes and wounds.

### **How do they test for RCD?**

Laboratories use monoclonal antibodies to test for RCD. Technicians take a sample of blood and examine it for the presence of specific antibodies against the disease. The only way a rabbit will have RCD antibodies is if it has had the disease or was vaccinated against it. Unfortunately, if the animals do not show clinical signs, there is no way to tell the vaccinated animals from the naturally affected ones using this test.

### **Can I vaccinate my rabbit against RCD?**

RCD vaccines have not been approved for use in the US. The use of an RCD vaccine would make it harder to identify animals with the disease, due to the presence of disease-specific antibodies after vaccination. The USDA-Animal and Plant Health Inspection Services determines national vaccination policies for foreign animal diseases such as RCD.

### **What kind of virus causes RCD?**

RCD is caused by a nonenveloped RNA virus. Antibiotics are not effective against viruses.

### **What part of the body does it attack?**

During necropsies of infected rabbits, viruses have been seen in the liver, spleen, lung, kidney, and brain.

**At present there are no additional restrictions on rabbit movements into California.**

### **Where can I get more information?**

Visit CDFA at [www.cdfa.ca.gov](http://www.cdfa.ca.gov)

- ▶ Selection and Use of Surface Disinfectants
  - ▶ Handwashing
  - ▶ Biosecurity Tips for Foreign Travelers
- or **Office International des Epizooties** at [www.oie.int](http://www.oie.int).

### **For more information, call:**

CDFA, Animal Health Branch

Headquarters	(916) 654-1447
Redding District	(530) 225-2140
Modesto District	(209) 491-9350
Fresno District	(559) 237-1843
Ontario District	(909) 947-4462

Or the USDA Area Office (916) 857-6170 or toll free (877) 741-3690.